



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,049	02/28/2002	David L. Whitmore	P21585	8566
7055	7590	01/18/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191				JAGANNATHAN, MELANIE
ART UNIT		PAPER NUMBER		
2666				

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/084,049	WHITMORE ET AL.
	Examiner	Art Unit
	Melanie Jagannathan	2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 4/15/04, 9/17/04.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,6-13,16-19 and 21-42 is/are pending in the application.
- 4a) Of the above claim(s) 31-42 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,6-13,16-19,21-30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

1. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 1,6-13,16-19 and 21-30, drawn to channel assignment, classified in class 370, subclass 329.
 - II. Claims 31-42, drawn to handoff, classified in class 370, subclass 331.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed such as channel assignment for transmission of data in a wireless network . The subcombination has separate utility such as setting up alternative connections that may be used as required to affect a handoff when needed or desired.

3. Newly submitted claims 31-42 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claimed subject matter regarding switching from a first wireless network to a second wireless network while sending data so that data is transmitted over both the first and second wireless networks is distinct from originally filed independent claims.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 31-42 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 6-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Pearce et al. US 5,910,951.

Regarding claim 1, the claimed ascertaining availability of the multiple dissimilar networks is disclosed by mobility manager with filter performing a filtration function to generate a list of qualifying networks (Figure 1, elements 26, 28, 30) with varying priorities over which data object from user source (Figure 1, element 10) may be transferred, the highest priority network is always chosen first as the default network. See column 1, lines 47-67, column 2, and lines 1-42. The claimed receiving data from a selected application of the plurality of applications is disclosed by user source being user of mobile or portable devices sending data objects. The claimed determining a designated network that is associated with the selected application is disclosed by filtration function is based on a combination of attributes of data object and the characteristics of potential networks. See column 2, lines 6-23. The claimed sending of the received data over the designated network when the designated route has been ascertained to be available is disclosed by first communication manager (element 22) with network availability monitor (element 58) transmitting data object over the highest priority qualifying network.

Regarding claims 6,7, the claimed default and alternate routes is disclosed when there is a loss of network availability, lower-priority qualifying networks are used for routing otherwise highest priority network is default. See column 3, lines 1-42, column 4, lines 13-67, column 5, and lines 1-12.

Regarding claims 8-9, the claimed designated route depending on port number assigned to selected application and IP address associated with application is disclosed by filtration function is based on a combination of attributes of data object. See column 2, lines 6-23.

Regarding claim 10, the claimed notifying a host network server of the availability of each wireless network is disclosed by communication manager with network availability monitor

that continually updates transmit scheduler (element 62) regarding availability of qualifying networks. See column 4, lines 13-19.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11-13, 17-19,21-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce et al. in view of Shand et al. US 6,147,976.

Regarding claims 11-13, 17-19,24-30, Pearce et al. discloses all the limitations of the claims except for a mobile router comprising a port routing table. Shand et al. discloses a router with filter table including entries with source and destination IP addresses, source and destination protocols, source and destination ports and an indication of action such as forwarding or discarding. See column 6, lines 18-41, column 10, and lines 21-36. At the time the invention was made it would have been obvious to modify Pearce et al. with table of router in Shand et al.

One of ordinary skill in the art would be motivated to do so for proper routing in case of default routing or discarding message or alternate routing.

Regarding claims 21-23, Pearce discloses all of the claims except for the claimed port route type indicator comprises alternate, ignore and default. Shand et al. discloses a router with filter table including entries with an indication of action such as forwarding or discarding. At the time the invention was made it would have been obvious to modify Pearce et al. with table of router in Shand et al. One of ordinary skill in the art would be motivated to do so for proper routing in case of default routing or discarding message or alternate routing.

8. **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pearce et al.

Regarding claim 16, Pearce et al. discloses all of the limitations of the claim except for the claimed mobile router notifying the host network server whenever any wireless network enters an in-coverage state. Pearce et al. discloses network availability monitor involving closer integration with each network's management functions such as receive signal strength so as to relieve communication endpoint of maintaining this information. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify Pearce et al. to have mobile router to notify network availability monitor when network is in-coverage. One of ordinary skill in the art would be motivated to do this for benefit of reduced traffic through reduced duplication of effort. See column 3, lines 32-40.

Response to Arguments

9. Applicant's arguments with respect to claims 1,6-13,16-19,21-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Riggan et al. US 5,898,673 disclose routing through alternate or secondary network.

Dahlin et al. US 6,122,263 disclose Internet access for cellular networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Jagannathan whose telephone number is 571-272-3163.

The examiner can normally be reached Monday-Friday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3163.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**FRANK DUONG
PRIMARY EXAMINER**

Melanie Jagannathan
Patent Examiner
AU 2666